

## Environmental Assessment Checklist

**Project Name:** Ronan Creek Fire Salvage  
**Proposed Implementation Date:** Fall 2022  
**Proponent:** Kalispell Unit, Northwest Land Office, Montana DNRC  
**County:** Lake

### Type and Purpose of Action

#### Description of Proposed Action:

The Kalispell Unit of the Montana Department of Natural Resources and Conservation (DNRC) is proposing the Ronan Creek Fire Salvage. The project is located approximately 6 miles west of Elmo, Montana (refer to Attachments vicinity map A-1 and project map A-2) and includes the following sections:

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools	T24N R22W Section 16	640	33
Public Buildings			
MSU 2 <sup>nd</sup> Grant			
MSU Morrill			
Eastern College-MSU/Western College-U of M			
Montana Tech			
University of Montana			
School for the Deaf and Blind	T25N R22W Section 26	640	570
Pine Hills School			
Veterans Home			
Public Land Trust			
Acquired Land			

Objectives of the project include:

- Salvage merchantable timber that was burned in the Elmo 2 wildfire.
- Generate revenue for the Common Schools Trust and the School for the Deaf and Blind.
- Begin reforestation efforts.

Proposed activities include:

Action	Quantity
<b>Proposed Harvest Activities</b>	<b># Acres</b>
Clearcut	
Seed Tree	
Shelterwood	
Selection	
Old Growth Maintenance/Restoration	
Commercial Thinning	
Salvage	592
<b>Total Treatment Acres</b>	<b>592</b>
<b>Proposed Forest Improvement Treatment</b>	<b># Acres</b>
Pre-commercial Thinning	
Site preparation/scarification	
Planting	570
<b>Proposed Road Activities</b>	<b># Miles</b>
New permanent road construction	
New temporary road construction	
Road maintenance	8.7
Road reconstruction	
Road abandoned	
Road reclaimed	
<b>Other Activities</b>	

<b>Duration of Activities:</b>	3 years
<b>Implementation Period:</b>	December 2022

The lands involved in this proposed project are held in trust by the State of Montana. (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA).

The DNRC would manage lands involved in this project in accordance with:

- The State Forest Land Management Plan (DNRC 1996),
- Administrative Rules for Forest Management (ARM 36.11.401 through 471),
- The Montana DNRC Forested State Trust Lands Habitat Conservation Plan (HCP) (DNRC 2010)
- and all other applicable state and federal laws.

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## Project Development

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### SCOPING:

- DATE:
  - August 6, 2022 – September 15, 2022
- PUBLIC SCOPED:
  - The scoping notice was posted on the DNRC Website: <http://dnrc.mt.gov/public-interest/public-notice>
  - Emails and letters of notice were sent to those on the statewide scoping list and adjacent landowners of the project.
- AGENCIES SCOPED:
  - Montana Department of Fish, Wildlife, and Parks, statewide tribal agencies, and internal DNRC staff.
- COMMENTS RECEIVED:
  - How many: 1
  - Comment: A DNRC archaeologist provided input on cultural resources in the project area and verbiage to be used in the archaeology section of this document.

DNRC specialists were consulted, including:

Marc Vessar, Forest Practices Program Manager  
Tony Nelson, Hydrologist  
Chris Forristal, Wildlife Biologist  
Tim Spoelma, Silviculturist/ Forest Ecologist  
Shawn Morgan, Service Forester  
Patrick Rennie, Archeologist

Internal and external issues and concerns were incorporated into project planning and design and will be implemented in associated contracts.

### OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS

**NEEDED:** (*Conservation Easements, Army Corps of Engineers, road use permits, etc.*)

- **United States Fish & Wildlife Service-** DNRC is managing the habitats of threatened and endangered species on this project by implementing the Montana DNRC Forested Trust Lands HCP and the associated Incidental Take Permit that was issued by the United States Fish & Wildlife Service (USFWS) in February of 2012 under Section 10 of the Endangered Species Act. The HCP identifies specific conservation strategies for managing the habitats of grizzly bear, Canada lynx, and three fish species: bull trout, westslope cutthroat trout, and Columbia redband trout. This project complies with the HCP. The HCP can be found at <http://dnrc.mt.gov/divisions/trust/forest-management/hcp>.
- **Montana Department of Environmental Quality (DEQ)-** DNRC is classified as a major open burner by DEQ and is issued a permit from DEQ to conduct burning activities on

state lands managed by DNRC. As a major open-burning permit holder, DNRC agrees to comply with the limitations and conditions of the permit.

- **Montana/Idaho Airshed Group-** The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2010). As a member, DNRC must submit a list of planned burns to the Airshed Group's Smoke Monitoring Unit describing the type of burn to be conducted, the size of the burn in acres, the estimated fuel loading in tons/acre, and the location and elevation of each burn site. The Smoke Monitoring Unit provides timely restriction messages by airshed. DNRC is required to abide by those restrictions and burn only when granted approval by the Smoke Monitoring Unit when forecasted conditions are conducive to good smoke dispersion.

## ALTERNATIVES CONSIDERED:

**No-Action Alternative:** No salvage harvest or planting would occur, and no revenue would be generated for school trust beneficiaries. Vegetative regeneration and insect/disease would run their natural courses. No road maintenance would occur.

**Action Alternative:** Fire-killed and damaged timber would be removed while it is still of good economic value. Harvest operations would be completed using ground-based machinery and approximately 8.7 miles of an existing road system would be utilized. Ponderosa pine, western larch and Douglas-fir seedlings would be planted in the Ronan Creek section (T25N R22W Section 26) to help regenerate the area.

## Impacts on the Physical Environment

Evaluation of the impacts on the No-Action and Action Alternatives including **direct, secondary, and cumulative** impacts on the Physical Environment.

## VEGETATION:

### Vegetation Existing Conditions:

Harvest Unit	Habitat Group	Fire Regime	Current Cover Type	Age Class (years)	DFC	RX	Acres
1	Moderately warm and dry (westside) Moderately cool and moist (westside)	Mixed	Western Larch/Douglas Fir/Ponderosa Pine	40-99	Western Larch/Douglas Fir/Ponderosa Pine	Fire Salvage	559
2	Warm and Dry (westside)	Low	Ponderosa Pine/Douglas-fir	40-99	Ponderosa Pine	Fire Salvage	33

**Fire Hazard/Fuels:** The project poses minimal to no fire hazard as fuels have been eliminated or heavily reduced throughout the project area due to the severity of the fire. Any remaining downed woody debris would contribute to surface fuels.

**Insects and Diseases:** Recent logging activity in the Ronan Creek section (T25N R22W Section 26) focused on the removal of Douglas-fir and western larch infected with Dwarf mistletoe, resulting in a healthy residual stand. After the fire, no indicators of insect or disease are evident in either project area.

**Sensitive/Rare Plants:** No plant species of concern have been discovered or documented.

**Noxious Weeds:** Canada thistle, Houndstongue, and Spotted Knapweed have been reported in the project area.

Vegetation	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>No-Action</b>														
Current Cover/DFCs	X				X				X					
Age Class				X				X				X	Y	V-1
Old Growth	X				X				X					
Fire/Fuels	X					X				X				V-2
Insects/Disease			X			X				X				V-3
Rare Plants	X				X				X					
Noxious Weeds		X				X				X			Y	V-4
<b>Action</b>														
Current Cover/DFCs	X				X				X					
Age Class			X				X				X			V-1
Old Growth	X				X				X					
Fire/Fuels		X			X					X				V-5
Insects/Disease	X				X				X					
Rare Plants	X				X				X					
Noxious Weeds			X			X				X			Y	V-6

**Comments:**

**V-1:** The high severity of the burn decreased the likelihood of cone and seed survival and germination rate. Therefore, natural establishment of a new age class will be challenging. Post-harvest planting would establish a new age class.

**V-2:** Residual standing trees and downed woody debris could provide fuel for future fire events.

**V-3:** Insects such as bark beetles generally attack stands that are stressed by environmental factors (such as fire). The small percentile of burned trees that may have a chance at survival would likely be killed in a bark beetle attack.

**V-4:** Due to active grazing leases and private property surrounding the project area, noxious weeds may continue to flourish regardless of logging activity.

**V-5:** Prescribed treatments would reduce fuel loading through the removal of dead and dying trees.

**V-6:** Timber harvest activities and associated road work may lead to an increase in the occurrence of noxious weeds in both sections.

*Vegetation Mitigations:*

The high severity of the Elmo 2 fire resulted in a major loss of overstory and understory vegetation in the project area. Planting seedlings of ponderosa pine, western larch and Douglas-fir in the Ronan Creek section will help to regenerate the stand, reset the age class, and move it towards its desired future condition. Planting may occur in the Hog Heaven parcel (Section 16 T24N R22W) if a road use permit is granted from the tribe.

A small portion of the Ronan Creek section contains ponderosa pine, Douglas-fir, and western larch that retained a green crown after the fire. Douglas-fir has a low tolerance to fire damage. After an on-site evaluation with silviculture specialists, it was determined that very few Douglas-fir will likely survive and therefore most will be salvaged. However, some fire resistant/ resilient species such as ponderosa pine and western larch will be individually evaluated and retained to provide shade and natural regeneration sources.

Before harvest operations begin, all harvest equipment must pass an inspection assuring that it will not transport weeds from other sites. The project area would be monitored for noxious weeds after harvest operations are complete, and herbicide treatments will be administered if necessary. Residual slash will be either scattered to prevent erosion and introduce organic matter into the soils or burned in slash piles to reduce fuel loading.

**SOIL DISTURBANCE AND PRODUCTIVITY:**

According to the *Soil Survey of Lake County Area, Montana* (NRCS 1991) soil types in the proposed parcel have a low or moderate susceptibility to sheet or rill erosion. Soils within the Ronan Creek parcel (S26 T25N R22W) are primarily gravelly or very gravelly silt loams.

**Soil Disturbance and Productivity Existing Conditions:**

Skid trails are evident from past timber management activities, but no substantial erosion attributable to timber harvest was identified on existing skid trails during field reconnaissance.

Roads in the Ronan Creek parcel were generally in very good shape with limited erosion. No delivery of material to streams or other bodies of water was noted during field reconnaissance.

The Elmo 2 fire burned through the project area in summer of 2022. Much of the parcel burned with moderate intensity. No areas of hydrophobic soils were identified during field reconnaissance.

Soil Disturbance and Productivity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Physical Disturbance (Compaction and Displacement)	X				X				X					
Erosion	X				X				X					
Nutrient Cycling		X				X				X			Y	S-1
Slope Stability	X				X				X					
Soil Productivity		X				X				X			Y	S-1
Action														
Physical Disturbance (Compaction and Displacement)		X				X				X			Y	S-2
Erosion		X				X				X			Y	S-3
Nutrient Cycling		X				X				X			Y	S-1
Slope Stability	X				X				X					
Soil Productivity		X				X				X			Y	S1

*Comments:*

**S-1:** The Elmo 2 fire burned through nearly all of the project area following a recently completed DNRC timber sale (Lake Mary Ronan) in 2021. Slash treatment was ongoing at the time of the fire, and nearly all slash and CWD left from that activity was consumed by the fire. Nutrient cycling and soil productivity concerns can be mitigated by leaving limbs and tops of salvaged trees on-site. In addition, trees and snags left on the parcel following salvage would contribute additional coarse woody debris to aid in nutrient cycling.

**S-2:** There is a low risk of impacts to physical disturbance of soils due to repeated entries into the proposed project area. These risks can be mitigated by using existing skid trails where they are located in acceptable areas, and by only operating ground-based equipment during periods where soils are dry, frozen or snow-covered.

**S-3:** there is a low risk of impacts to erosion in the proposed project area due to operation of ground-based equipment on burned areas. This risk can be mitigated by ensuring that all skid trails are located away from draw bottoms, and by ensuring that all applicable forest management BMPs are applied during salvage activities.

*Soil Mitigations:*

- Limit equipment operations to periods when soils are relatively dry, (less than 20 percent oven-dried weight), frozen, or snow-covered in order to minimize soil compaction and rutting and maintain drainage features. Check soil moisture conditions prior to equipment start-up.

- On ground-based units, especially on previously harvested areas, the logger and sale administrator would agree to a skidding plan prior to equipment operations. Skid-trail planning would identify which main trails to use and how many additional trails are needed. Trails that do not comply with BMPs (i.e. trails in draw bottoms) would not be used unless impacts can be adequately mitigated. Regardless of use, these trails may be closed with additional drainage installed, where needed, or grass-seeded to stabilize the site and control erosion.
- Tractor skidding should be limited to slopes of less than 40 percent unless the operation can be completed without causing excessive displacement or erosion. Based on site review, short, steep slopes may require a combination of mitigation measures, such as adverse skidding to a ridge or winchline, and skidding from more moderate slopes of less than 40 percent.
- Keep skid trails to 20 percent or less of the harvest unit acreage. Provide for drainage in skid trails and roads concurrently with operations.
- Retain 12-20 tons per acre of large woody debris on the Ronan Creek parcel where possible. On units where whole tree harvesting is used, implement one of the following mitigations for nutrient cycling: 1) use in-woods processing equipment that leaves slash on site; 2) for whole-tree harvesting, return-skid slash and evenly distribute within the harvest area; or 3) cut tops from every third bundle of logs so that tops are dispersed as skidding progresses.

### **WATER QUALITY AND QUANTITY:**

Annual precipitation is low with all proposed harvest located in the 18-20 or 20-30-inch precipitation zones. The proposed salvage does not include harvesting within 50 feet of a class 1 stream.

### **Water Quality and Quantity Existing Conditions:**

The proposed project area contains a class 3 stream segment. This stream does not connect to any downstream water of any type. The SMZ burned moderately hot during the Elmo 2 fire with most of the vegetation in the SMZ being killed, including brush. Grass/forbs were also burned, but during field reconnaissance in September 2022, many of these were re-emerging in the riparian areas where moisture is prevalent. No rilling or erosion from burned areas was observed during field reconnaissance.

Water Quality & Quantity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
No-Action														
Water Quality		X				X				X			Y	H-1
Water Quantity		X				X				X			Y	H-2
Action														



Water Quality & Quantity	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Water Quality		X				X				X			Y	H-1
Water Quantity	X				X					X			Y	H-2

*Comments:*

H-1: There is a low risk of water quality impacts due to exposure of bare soil from the Elmo 2 fire in 2022. This risk would remain following salvage harvesting activities until slopes begin to re-vegetate and a new stand of trees becomes established. These risks can be mitigated by leaving limbs and tops and any remaining coarse woody debris on the hillsides to intercept raindrops and slow overland flow. In addition, implementation of all applicable forest management BMPs would reduce erosion risk, especially on established skid trails and roads.

H-2: There is a low risk of water quantity impacts due to the trees killed by the Elmo 2 fire. These trees will no longer evaporate or transpire water within the project area, which could lead to higher levels of water available for runoff. The proposed salvage would not increase this risk provided only trees killed by the fire or at imminent risk of death are salvaged. The primary draw and class 3 stream in the project area may see increased flows for several years following the fire and salvage, which could lead to additional reaches of the draw scouring and being classified as a stream.

*Water Quality & Quantity Mitigations:*

- Follow all applicable forest management BMPs, Montana Administrative Rules for Forest Management and the Montana Streamside Management Zone Law and Rules.

**FISHERIES:**

**Fisheries Existing Conditions:** There are no fish-bearing streams in the proposed project area.

**No-Action:** No direct or indirect impacts would occur to affected fish species or affected fisheries resources beyond those described in Fisheries Existing Conditions. Cumulative effects (other related past and present factors; other future, related actions; and any impacts described in Fisheries Existing Conditions) would continue to occur.

**Action Alternative (see Fisheries table below):**

Fisheries	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>No-Action</b>														
Sediment	X				X				X					
Flow Regimes	X				X				X					
Woody Debris	X				X				X					
Stream Shading	X				X				X					
Stream Temperature	X				X				X					
Connectivity	X				X				X					

Fisheries	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Populations	X				X				X					
<b>Action</b>														
Sediment	X				X				X					
Flow Regimes	X				X				X					
Woody Debris	X				X				X					
Stream Shading	X				X				X					
Stream Temperature	X				X				X					
Connectivity	X				X				X					
Populations	X				X				X					

### WILDLIFE:

**Wildlife Existing Conditions:** The 1,280-acre Project Area contains a variety of habitat conditions for native wildlife species, ranging from open wetlands to closed-canopy mature forest. The two DNRC-managed parcels that constitute the Project Area are not included in DNRC's Habitat Conservation Plan (HCP) (*USFWS and DNRC 2010*). The Project Area is surrounded by private industrial timber lands, tribal lands belonging to the Confederated Salish and Kootenai Tribe (CSKT), and other private agricultural/grazing lands. Approximately 6.4 miles of existing roads occur within the Project Area, of which 0.1 miles are potentially open to public motorized use and 6.3 miles are restricted. Active grazing leases occur within the Project Area (cows were observed) and occasional motorized use of roads by the leasee is permitted. The Ronan Creek section (section 26, T25N R22W) was harvested with a mix of seed tree, shelterwood, and commercial thin prescriptions within the last two years. Habitat conditions post-harvest were primarily open stands with scattered mature trees and little understory. The Hog Heaven section (section 16 T24N R22W) contained a mix of open grassland and forested stands. Both Project Area parcels were burned by the Elmo Fire in August of 2022. Fire severity was predominantly stand-replacement in forested areas, with few live trees left in most of the parcels. Merchantable ( $\geq 9"$  dbh) burned snag densities in the Ronan Creek parcel generally range from 15 to 30 snags/ac, with a few small areas having greater snag densities of approximately 70 snags/ac. The Hog Heaven parcel contains higher snag densities concentrated in patches interspersed with burned grasslands. Most of the larger downed wood that was present within the Project Area was consumed by the recent fire. Overall, habitat conditions within the Project Area are limited for most wildlife species except those that utilized recently burned habitat and snags for any part of their life history.

**No-Action:** None of the proposed activities would occur. In the short-term, no changes to the amounts, quality, or spatial arrangement of forested or burned habitat would occur. No change to the density of burned snags would occur and wildlife would not be displaced by salvage logging activities. Overall, in the absence of other natural disturbance, current wildlife habitat conditions would be expected to persist under the No-Action Alternative.

**Action Alternative (see Wildlife table below):**

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Threatened and Endangered Species														
Grizzly bear ( <i>Ursus arctos</i> ) Habitat: Recovery areas, security from human activity	X				X				X				Y	WI-1
Canada Lynx ( <i>Felis lynx</i> ) Habitat: SF hab.types, dense sapling, old forest, deep snow zone	X				X				X					WI-2
Yellow-billed cuckoo ( <i>Coccyzus americanus</i> ) Habitat: open cottonwood riparian forest with dense brush understories (Lake and Flathead counties)	X				X				X					WI-2
Sensitive Species														
Bald eagle ( <i>Haliaeetus leucocephalus</i> ) Habitat: Late-successional forest within 1 mile of open water	X				X				X					WI-3
Black-backed woodpecker ( <i>Picoides arcticus</i> ) Habitat: Mature to old burned or beetle-infested forest			X				X			X				WI-4
Common loon ( <i>Gavia immer</i> ) Habitat: Cold mountain lakes, nest in emergent vegetation	X				X				X					WI-2
Fisher ( <i>Pekania pennanti</i> ) Habitat: Dense mature to old forest less than 6,000 feet	X				X				X					WI-2

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
in elevation and riparian														
<b>Flammulated owl</b> <i>(Otus flammeolus)</i> Habitat: Late-successional ponderosa pine and Douglas-fir forest	X				X				X				Y	WI-5
<b>Peregrine falcon</b> <i>(Falco peregrinus)</i> Habitat: Cliff features near open foraging areas and/or wetlands	X				X				X					WI-2
<b>Pileated woodpecker</b> <i>(Dryocopus pileatus)</i> Habitat: Late-successional ponderosa pine and larch-fir forest	X				X				X					WI-2
<b>Fringed myotis</b> <i>(Myotis thysanodes)</i> Habitat: low elevation ponderosa pine, Douglas-fir and riparian forest with diverse roost sites including outcrops, caves, mines		X				X			X					WI-6
<b>Hoary bat</b> <i>(Lasiurus cinereus)</i> Habitat: coniferous and deciduous forests and roost on foliage in trees, under bark, in snags, bridges		X				X			X				Y	WI-7
<b>Townsend's big-eared bat</b> <i>(Plecotus townsendii)</i> Habitat: Caves, caverns, old mines	X				X				X					WI-2
<b>Wolverine</b> ( <i>Gulo gulo</i> )	X				X				X					WI-2

Wildlife	Impact												Can Impact be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Habitat: high elevation areas that retain high snow levels in late spring														
Big Game Species														
Elk		X				X				X			Y	WI-8
Whitetail		X				X				X			Y	WI-8
Mule Deer		X				X				X			Y	WI-8

*Comments:*

**WI-1. Grizzly Bear** – The Project Area is not in a recovery zone and is over 16 miles (across Flathead Lake) from non-recovery occupied habitat (Wittinger 2002). While the occasional presence of a grizzly bear in the Project Area is possible, especially given recent bear activity documented within the Salish range, appreciable use by grizzly bears would not be expected due to the absence of preferred habitat, lack of cover and foraging vegetation due to recent fire, low bear densities and distance from occupied grizzly bear habitat. The greatest risks to bears within the larger surrounding area would continue to be human habitations and associated attractants that bring bears into conflict with people. Mitigations included under the Action Alternative would require contractors to manage potential attractants to minimize conflicts.

**WI-2.** This species was evaluated and it was determined that the Project Area lies outside of the normal distribution for the species, and/or suitable habitat was not found to be present.

**WI-3. Bald Eagle** – A portion of Project Area falls within the territory of the Lake Mary Ronan eagle territory but outside of the primary use area. This eagle pair likely uses Lake Mary Ronan almost exclusively. No harvesting activities would occur within half a mile of the last known nest site or within 0.25 miles of Lake Mary Ronan. Measurable impacts to the nesting site would not be expected. Log hauling would occur closer to the lakeshore along an open road that receives daily traffic by residents and recreationalists. Homes, docks, and other open roads are situated along much of the Lake Mary Ronan shoreline. Foraging eagles could be temporarily disturbed by activities if occurring within the Project area, however, the number of home sites, extensive boating use and open roads around the lake would suggest that eagles using this territory are likely habituated to moderate amounts of human disturbance.

**WI-4.** Approximately 1,007 acres of forest burned within the Project Area is potentially suitable for use by black-backed woodpeckers. Proposed salvage harvesting would affect 592 acres (58.8% of available habitat in the Project Area), primarily in the Ronan Creek section with 559 acres of harvest. Under the action alternative, habitat quality for black-backed woodpeckers would decrease, as these birds prefer dense stands of snags burned within the last 5 years. Harvest prescriptions on these acres would remove most snags and suitable habitat. Submerchantable and pole-sized trees would be retained in harvest units and could provide potential foraging habitat for black-backed woodpeckers, although only a few small areas of the Project Area contain these attributes. Approximately 63 acres in the Ronan Creek parcel and 357 acres in the Hog Heaven parcel would remain unharvested and provide suitable black-backed woodpecker habitat. Black-backed woodpeckers in the Project Area could be temporarily disturbed or displaced by harvesting activities for up to one year. Suitable habitat

connectivity outside of the Project Area is moderate to poor due to interspersed unforested areas and variable patterns of forest management on adjacent private and CSKT tribal lands. Salvage logging is presently occurring on private timberlands adjacent to the Ronan Creek parcel and plans for salvage harvest on CSKT lands bordering the Hog Heaven parcel are unknown. Land ownership and forest landscape patterns are similar within the 21,349-acre Elmo Fire boundary, of which is 74.1% CSKT lands and 62.2% forest burned at various severities.

**WI-5. Flammulated Owls** – Approximately 970 acres of suitable flammulated owl cover types are present within the Project Area, however high-severity wildfire removed suitable habitat conditions. Appreciable use of the Project Area by flammulated owls would not be expected. Large snags would be retained at up to 4 per acre in areas proposed for harvest. Thus, impacts on flammulated owls or habitat from salvage logging would be negligible.

**WI-6. Fringed myotis** – The Project Area contains some rocky outcrops that could be used by roosting fringed myotis. No known caves or mines are present. Patterns of use within recently burned areas by fringed myotis are unknown. Harvesting activities would not generally occur in these areas, however roosting bats (should they be present) could be temporarily disturbed by equipment in proximity to rocky areas. As these sites are not high-congregation areas and disturbance would be temporary, low impacts to fringed myotis would be anticipated.

**WI-7. Hoary bat** – The proposed activities would affect approximately 592 acres of potential hoary bat habitat. Because hoary bats typically roost in trees and snags, they could be temporarily disturbed or displaced by timber harvesting for up to one season. Potential disturbance would only be expected from June through September, when hoary bats are in Montana. After the conclusion of activities, continued use of harvested areas by hoary bats would be anticipated. At least 2 large snags and 2 large snag recruitment trees per acre (>21 inches dbh, or largest size class available), or 4 snags/acre in high fire mortality areas, would be retained and could provide roosting habitat. Hoary bats are considered common and widespread throughout Montana, but wind energy and diseases such as white-nosed syndrome pose threats to their population (Bachen et al 2020).

**WI-8. Big Game** – The Project Area is considered to be winter range for deer and elk (DFWP 2008). Year-round use of the Project Area by these species was likely prior to the Elmo Fire. The proposed activities would focus primarily on removing dead and dying trees killed in the burn and would have minimal effects on thermal cover or snow intercept. Logging activity may displace wintering animals from November 1 to March 31 in the winter of 2022/2023. However, considering that very little forage and thermal cover remains in the area and more suitable winter range exists near the Project Area in unburned habitat, it is unlikely that much displacement of wintering animals would occur. Widely scattered green trees that are likely to survive would be retained, as would available (burned) submerchantable trees to aid in reducing sight distances. Vegetation would recover over time; however appreciable vegetative cover will be lacking for the next 10 years. Tree planting is planned and would speed forest recovery. No new roads would be built and all restricted roads would remain restricted to motorized use by the public.

*Wildlife Mitigations:*

- If a threatened or endangered species is encountered, consult a DNRC biologist immediately. Similarly, if undocumented nesting raptors or wolf dens are encountered within ½ mile of the Project Area, contact a DNRC biologist.

- Contractors will adhere to food storage and sanitation requirements as described in the timber sale contract. Ensure that all attractants such as food, garbage, and petroleum products are stored in a bear-resistant manner.
- Prohibit contractors and purchasers conducting contract operations from carrying firearms while on duty as per *ARM 36.11.444(2)*.
- Effectively close all restricted roads and skid trails in the Project Area via a combination of gates, berms, rocks, and stumps.
- Retain areas of burned advanced regeneration and non-merchantable snags to the maximum extent practicable.
- Retain at least 2 snags and 2 snag recruits per acre >21 inches dbh or the next available size class, particularly favoring ponderosa pine, western larch and Douglas-fir for retention. Four snags an acre (of the largest size classes) should be retained in areas of 100% fire mortality.
- Retain 10-18 tons/acre of coarse-woody debris and emphasize retention of 15-inch diameter downed logs, aiming for at least one 20-foot-long section per acre where possible. High-hazard cleanup areas adjacent to private lands are exempt from this mitigation.

*Literature:*

DFWP. 2008. Maps of moose, elk, mule deer, and white-tailed deer distribution in Montana. *In* Individual GIS data layers. Available online at: <https://gis-mtfwp.opendata.arcgis.com/>

MNHP. 2022. Natural Heritage Map Viewer. Montana Natural Heritage Program. Retrieved on September 28, 2022, from <http://mtnhp.org/MapViewer>.

USFWS and DNRC. 2010. Montana Department of Natural Resources and Conservation Forested Trust Lands Habitat Conservation Plan, Final Environmental Impact Statement, Volumes I and II., U.S. Department of Interior, Fish and Wildlife Service, Region 6, Denver, Colorado and Montana Department of Natural Resources and Conservation, Missoula, MT.

## AIR QUALITY:

Air Quality	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>No-Action</b>														
Smoke	X				X				X					
Dust		X				X				X			Y	AQ-1
<b>Action</b>														
Smoke		X			X					X				AQ-2
Dust		X			X					X			Y	AQ-2

### Comments:

**AQ-1:** Dust may be created by public traffic around Lake Mary Ronan. Additionally, dust is expected from landowners who are conducting fire salvage operations.

**AQ-2:** Smoke will be created from pile burning, and dust may be created from log hauling.

### Air Quality Mitigations:

All pile burning activity would be approved by the Montana/Idaho Airshed group and the DEQ. To verify adequate burning conditions, a test burn will be conducted.

The DNRC will implement dust mitigation measures as needed. These mitigations may include slow driving speeds, a restricted haul period, and/or application of dust abatement on haul routes.

## ARCHAEOLOGICAL SITES / AESTHETICS / DEMANDS ON ENVIRONMENTAL RESOURCES:

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>No-Action</b>														
Historical or Archaeological Sites	X													
Aesthetics	X													
Demands on Environmental Resources of Land, Water, or Energy	X													
<b>Action</b>														
Historical or Archaeological Sites	X				X									
Aesthetics		X			X					X				ARC-1
Demands on Environmental	X													



Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Resources of Land, Water, or Energy														

*Comments:*

ARC-1: Aesthetics would be altered as a large proportion of the burnt trees will be removed.

*Mitigations:*

Scoping letters were sent to those Tribes that requested to be notified of DNRC timber sales. No response was returned that identified a specific cultural resource issue. A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search results revealed that no cultural or paleontological resources have been identified in the APE, but it should be noted that Class III level inventory work has not been conducted there to date.

Because the topographic setting and geology suggest a low to moderate likelihood of the presence of cultural or paleontologic resources, proposed timber harvest activities are expected to have No Effect to Antiquities. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

Planted seedlings will enhance aesthetics as the trees mature.

**OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:** *List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

- 2020 Lake Mary Ronan Timber Sale EA

## Impacts on the Human Population

Evaluation of the impacts on the proposed action including **direct, secondary, and cumulative** impacts on the Human Population.

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
<b>No-Action</b>														

Will Alternative result in potential impacts to:	Impact												Can Impact Be Mitigated?	Comment Number
	Direct				Secondary				Cumulative					
	No	Low	Mod	High	No	Low	Mod	High	No	Low	Mod	High		
Health and Human Safety	X				X				X					
Industrial, Commercial and Agricultural Activities and Production	X				X				X					
Quantity and Distribution of Employment	x				X				X					
Local Tax Base and Tax Revenues	X				X				X					
Demand for Government Services	X				X				X					
Access To and Quality of Recreational and Wilderness Activities	X				X				X					
Density and Distribution of population and housing	X				X				X					
Social Structures and Mores	X				X				X					
Cultural Uniqueness and Diversity	X				X				X					
<b>Action</b>														
Health and Human Safety	X				X				X					
Industrial, Commercial and Agricultural Activities and Production	X				X				X					
Quantity and Distribution of Employment	X				X				X					
Local Tax Base and Tax Revenues	X				X				X					
Demand for Government Services	X				X				X					
Access To and Quality of Recreational and Wilderness Activities	X				X				X					
Density and Distribution of population and housing	X				X				X					
Social Structures and Mores	X				X				X					
Cultural Uniqueness and Diversity	X				X				X					

*Comments:* The proposed project would have no impacts on the human population.

*Mitigations:* N/A

**Locally Adopted Environmental Plans and Goals:** *List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

- N/A

**Other Appropriate Social and Economic Circumstances:**

Costs, revenues and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return. The estimated stumpage is based on comparable sales analysis. This method compares recent sales to find a market value for stumpage. These sales have similar species, quality, average diameter, product mix, terrain, date of sale, distance from mills, road building and logging systems, terms of sale, or anything that could affect a buyer's willingness to pay.

**No Action:** The No Action alternative would not generate any return to the trust at this time.

**Action:** The timber harvest would generate additional revenue for the School for the Deaf and Blind Trust as well as the Common Schools Trust. The estimated return to the trust for the proposed harvest is \$111,016 based on an estimated harvest of 1.274 million board feet (7,268 tons) and an overall stumpage value of \$10 per ton for ponderosa pine and \$21.61 per ton for all other sawlogs. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives, they are not intended to be used as absolute estimates of return.

**References**

DNRC 1996. State forest land management plan: final environmental impact statement (and appendixes). Montana Department of Natural Resources and Conservation, Forest Management Bureau, Missoula, Montana.

DNRC. 2010. Montana Department of Natural Resources and Conservation Forested State Trust Lands Habitat Conservation Plan: Final EIS, Volume II, Forest Management Bureau, Missoula, Montana.

**Does the proposed action involve potential risks or adverse effects that are uncertain but extremely harmful if they were to occur?**

No

**Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?**

No

**Environmental Assessment Checklist Prepared By:**

**Name:** Kayla Johnson  
**Title:** Forester  
**Date:** September 29, 2022

**Finding**

**Alternative Selected**

Action Alternative

**Significance of Potential Impacts**

I find that the impacts of the proposed action alternative as described in this Environmental Assessment are not significant. This Environmental Analysis has been completed for the Ronan Creek Fire Salvage. After a thorough review of the EA, project file, responses/discussions with Department and outside specialists, Department policies, standards, and guidelines, the State Land Management Rules, and the HCP rules, I have made the decision to choose the action alternative. I believe this EA has provided a good approximation of what this project would accomplish. Salvaging timber from the two sections included in this EA in a timely manner would allow for maximum revenue generation for the School for the Deaf and Blind and the Common Schools trusts. Additionally, restoration efforts such as planting would initiate a new stand structure and move the area towards its desired future condition.

**Need for Further Environmental Analysis**

☐ EIS

☐ More Detailed EA

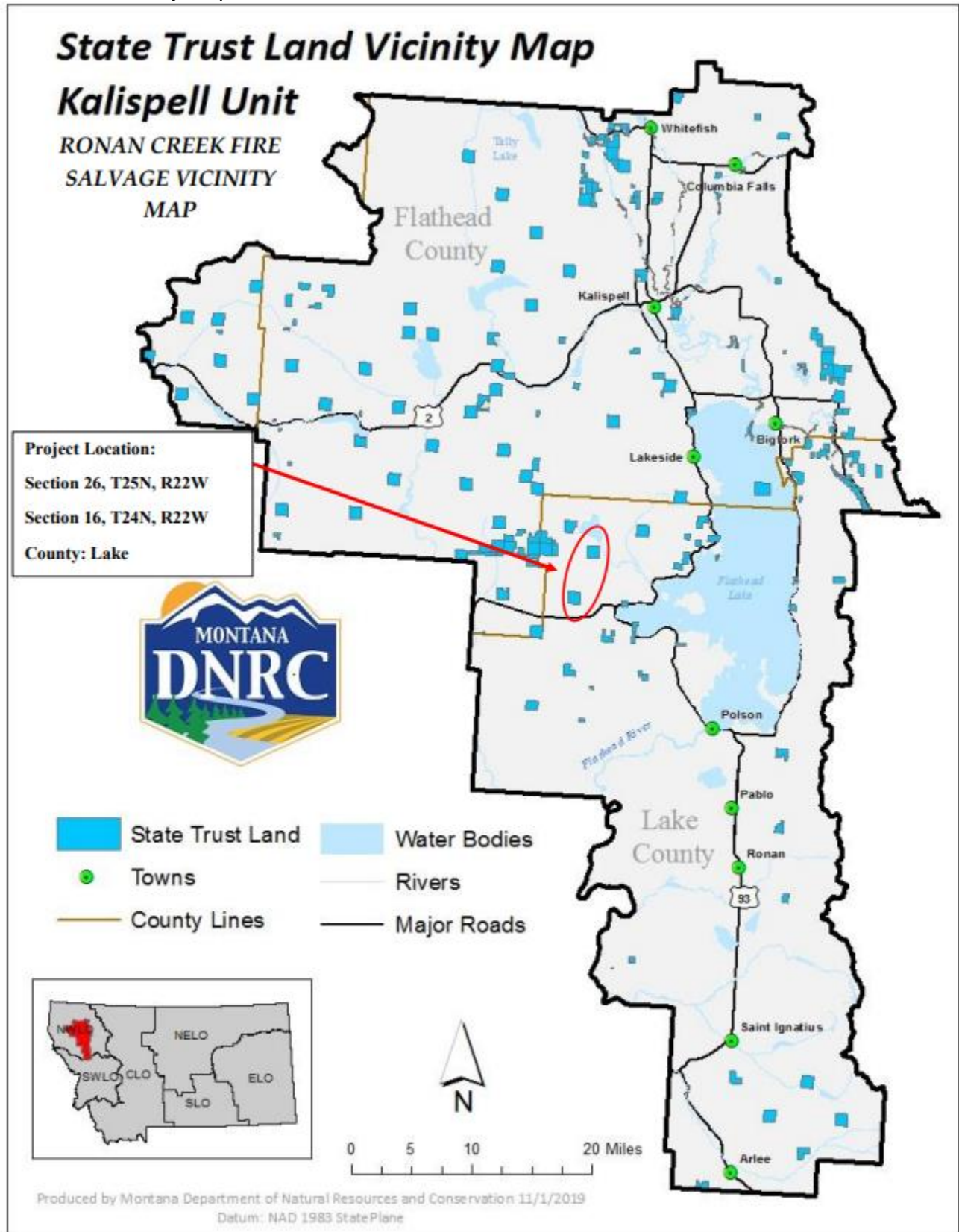
☒ No Further Analysis

**Environmental Assessment Checklist Approved By:**

**Name:** David M. Poukish  
**Title:** Kalispell Unit Manager  
**Date:** October 3, 2022  
**Signature:** /s/ David M. Poukish

## **Attachment A - Maps**

A-1: Timber Sale Vicinity Map



A-2: Timber Sale Harvest Units

